

Standard Form of a Linear Equation p 316 - 319

i) $y = mx + b$ - Slope/Intercept Form
 m = slope
 b = y-int

ii) 2 variable form
 $ax + by = c$
 (Combo questions) c = total value
 a } quantity
 b } per variable

iii) Standard Form
 $Ax + By + C = 0$

Mar 25-1:22 PM

$y = -2x + 3$ put in standard form
 $0 = Ax + By + C$
 $y - y = -2x - y + 3$
 $0 = -2x - y + 3$

Value must be +ve
 $0 = -2x - y + 3$
 $-1(0) = -1(-2x - y + 3)$, whole number
 $0 = +2x + y - 3$

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$y = mx + b$
 Put in standard form
 $y = \frac{2}{3}x + 5$
 $0 = Ax + By + C$
 $0 = \frac{2}{3}x - y + 5$
 $3(0) = 3(\frac{2}{3}x - y + 5)$
 $0 = \frac{6}{3}x - 3y + 15$
 $0 = 2x - 3y + 15$

$Ax + By + C = 0$

Check

$2x - 3y + 15 = 0$
 $-3y + 15 = -2x$
 $-3y = -2x - 15$
 $\frac{-3}{-3}y = \frac{-2x}{-3} - \frac{15}{-3}$
 $y = \frac{2}{3}x + 5$

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$5x - 2y + 3 = 0$ slope/intercept form
 $-2y + 3 = -5x$ $y = mx + b$
 $-2y = -5x - 3$
 $\frac{-2}{-2}y = \frac{-5x}{-2} - \frac{3}{-2}$
 $y = \frac{5}{2}x + \frac{3}{2}$

$5x - 2y + 3 = 0$
 $5x + 3 = 2y$
 $\frac{5x}{2} + \frac{3}{2} = \frac{2y}{2}$
 $\frac{5}{2}x + \frac{3}{2} = y$

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$Ax + By + C = 0$
 $2x - 3y = 12$
 $2x - 3y - 12 = 0$

$y = 3x + 5$
 $y - y = 3x - y + 5$
 $0 = 3x - y + 5$

$\frac{1}{3}(\frac{x+5}{\frac{1}{3}}) = (2y)3$
 $x + 5 = 6y$
 $x - 6y + 5 = 0$
 $Ax + By + C = 0$

$3(\frac{2}{3}x - 2y - 1) - 0$
 $\frac{6}{3}x - 6y - 10 = 0$
 $2x - 6y - 10 = 0$

Mar 25-2:15 PM

Seatwork p. 319-321 q. 2,5 a,c,e,g,6, 9,10,12

Apr 24-1:51 PM